

The applicant expresses his appreciation to the Examiner for the identification of essentially word processing informalities and errors in the claims. Claims 1 to 6 and 8 to 10 have been amended as to format, antecedent basis and grammar to overcome the rejection under 35 USC 112, second paragraph. The format for the claims is now in subparagraph form in order to provide a better understanding of the scope and extent of the subject matter to be protected by a patent. The amendment of the claims is intended solely to respond to the rejection under 35 USC 112, second paragraph, and is not intended to introduce and limitations on the scope and extent of protection or any equivalents thereof. The features recited in claims 1 to 6 and 8 to 10 are in the statutory acceptable format of 35 USC 112, paragraph 6 and for which there is antecedent basis in the written description. It should be noted that claims are not intended to be a recitation of the written description whereas the description can be a reference for the words and meaning of the claims. The description is directed to one skilled in the art and to that extent the terms and phrases used in the description are understood by those skilled in the art.

Claims 11 to 16 are cancelled. New claims 17 to 20 are presented herewith. Claims 17 to 20 are considered as reciting statutory patentable subject matter within 35 USC 101.

Reconsideration of the application as amended is requested and after such reconsideration an official action of Notice of Allowability.

Respectfully submitted,

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Amended claims 1 to 6 and 8 to 10:

1 (amended). A radiological imaging device, comprising:

- a. means for emission of an X-ray beam [.] ;
- b. means for receiving the X-ray beam after [it] the beam has crossed an object to be studied [.] ; and
- c. means for calculation for controlling the means for emission and for processing data from the means for receiving [.] ;
- d. wherein the object [being capable being] is placed between the means for receiving and a means for compression [element.] ;
- e. the means for compression [element being capable of] being removably fixed on the device [.] ; and
- f. the means for calculation [unit a] including means for optimizing [the] image quality over a particular area defined by the means for compression [element].

2 (amended). The device according to claim 1, comprising:

[a] means for [unit of] recognition of the compression means.

3 (amended). The device according to claim 2, wherein the means for recognition [unit] includes at least one detection element and an adapter connected to an output of the detection element for [the] transfer of data from the detection element to a communication bus associated with [to] the device [.] and the means for calculation [unit] for processing data from the means for recognition [unit].

4 (amended). A radiological imaging device comprising:

- a. means for emission of an X-ray beam [.] ;
- b. [a] means for receiving the X-ray beam after [it] the beam has crossed an object to be studied [.] ;
- c. an element [presenting] having a given X-ray absorption [capable of being] removably fixed on the device [.] ; and

d. [a] means for calculation for controlling the means for emission and for processing data from the means for receiving, the means for calculation including [a] means for optimizing [the] image quality over a particular area defined by the element.

5 (amended). The device according to claim 4, wherein the [compression] element includes means for coding [coder capable of] for cooperating with [a] the means for recognition of the [compression] element.

6 (amended). A radiological imaging method, in which [an object] a compression element for an object is mounted on a radiological device having means for emission of an X-ray beam, [a] means [forreceiving] for receiving [of] the X-ray beam after [it] the beam has crossed the object to be studied and means for calculation [unit] for controlling the means for emission and for processing data from the means for receiving, comprising the steps of:

- a. placing the object between the means for receiving and the compression element [.] ;
- b. taking a first radiological image of the object; and
- c. processing the first radiological image [is] in order to optimize [the] image quality over a particular area defined by the compression element.

8 (amended). The method according to claim 6 [in which, from] comprising the steps of:

- a. establishing a histogram of the [X-rayed] image (real histogram) [.] ;
- b. establishing a mathematical model of the image chain [and from the] ;
- c. determining parameters of the object [obtained] by calibration [.] ;
- d. determining parameters for acquisition of the image;
- e. determining parameters of the means for receiving;
- f. determining parameters for positioning the device;

[a)] g. using steps a to f [the mathematical model of the image chain and object and a set of parameters of acquisition, of the detector, of the positioner and of the object] to determine two gray level values, min_gray and max_gray, taken in the particular area and delimiting a useful gray area;

[b] h. eliminating the part below min_gray and the part above max_gray [is eliminated] in the real histogram in order to obtain a limited histogram;

[c] i. applying a set of rules [is applied] to the limited histogram in order to determine a WL brightness level; and

[d] j. obtaining a WW contrast [is obtained] from the WL brightness level and possibly from one or more parameters chosen by [the] a user or fixed a priori.

9 (amended). The method according to claim 7 [in which, from] comprising the steps of:

a. establishing a histogram of the [X-rayed] image (real histogram) [,]
;

b. establishing a mathematical model of the image chain [and from
the] ;

c. determining parameters of the object [obtained] by calibration [,] ;

d. determining parameters for acquisition of the image;

e. determining parameters of the means for receiving;

f. determining parameters for positioning the device;

[a)] g. using steps a to f [the mathematical model of the image chain and object and a set of parameters of acquisition, of the detector, of the positioner and of the object] to determine two gray level values, min_gray and max_gray, taken in the particular area and delimiting a useful gray area;

[b] h. eliminating the part below min_gray and the part above max_gray [is eliminated] in the real histogram in order to obtain a limited histogram;

[c] i. applying a set of rules [is applied] to the limited histogram in order to determine a WL brightness level; and

[d] j. obtaining a WW contrast [is obtained] from the WL brightness level and possibly from one or more parameters chosen by [the] a user or fixed a priori.

10 (amended). A radiological imaging process, in which an element [presenting] having a given X-ray absorption is placed on the path of an X-ray beam of a radiological device, the radiological device comprising means for emission of [an] the X-ray beam, [a] means for receiving the X-ray beam after [it] the beam has crossed an object to be studied and [a] means for calculation [unit] for controlling the means for emission and for processing data from the means for receiving, comprising the steps of:

- a. placing the object on the path of the X-ray beam [,] ;
- b. taking a first radiological image of the object and [,] ;
- c. processing the first radiological image in order to optimize [the] image quality on a particular area defined by the element.